mol per carboxyl group existing in the components of (A) and (D).

Quantity of the carboxyl group existing in the component of (A), (B), or (D) can be determined by the conventional method such as titration method and IR method.

The photosensitive resin composition of the present invention can be prepared by dissolving, mixing, and kneading the above components of (A) to (F) and the various kinds of additives as described above.

The photosensitive film of the present invention can be produced by laminating the layer (the photosensitive layer) of the above photosensitive resin composition of the present invention on a support film.

The process for production thereof is as follows:

The prepared resin composition is coated on the above support film of polymer film uniformly, and is then changed into a dried membrane by heating and/or blowing hot air to remove a solvent. The dried membrane has preferably a thickness of 1-200μm, more preferably of 50-100μm, though the thickness is not limited to a special one.

The support includes a polymer film such as the film made of polyethylene terephthalate, polypropylene, or

polyethylene. A polyethylene terephthalate film is preferable. The polymer film must be finally removed from the photosensitive layer to separate. Therefore, the polymer film should not be processed unremovably on the surface or be made from unremovable material. The polymer film has preferably a thickness of 5-100 μm, more preferably of 10-30 μm. Two layers of the polymer film can be laminated on the both surfaces of the photosensitive layer in such a way that the one may be used for a support film and another for a protective film. The protective film includes a plastic film such as polyester.

The photosensitive film of the present invention thus obtained, comprising the two layers of the photosensitive layer and the polymer film layer can be stored as it is or in a roll reeled up after a protective film is laminated on another surface of the photosensitive layer.

The resin composition of the present invention may be applied for a coating agent, a printing ink, an adhesive agent, and a make-up material as mentioned above, and can also be used in micro-gel or emulsion. The resin composition is coated on various kinds of base material (such as paper, plastic, metal, and wood) by a method such as comma coating, docter blading, screen-printing, curtain flow coating, and spray coating, and is then cured by the irradiation of an active energetic ray.

The active energetic ray includes ultra-violet ray, electron ray, and X ray. The ultra-violet ray irradiates preferably in an amount of 10-10,000mJ/cm^2 , and the electrode ray irradiates preferably in an amount of 0.1-100Mrad.

The resin composition and the photosensitive film of the present invention in the liquid states are useful for an insulating material in the interlayer of electronic parts, and also for the soldering resist ink for a printed substrate. It also can be used for a painting material, a coating agent, and an adhesive agent.

The cured product of the present invention can be obtained by curing the above resin composition or the photosensitive film of the present invention by the irradiation of an energetic ray such as ultra-violet ray. The irradiation of energetic ray such as ultra-violet ray can be carried out by a conventional method. For example, ultra-violet ray can irradiate from an ultra-violet generating device such as a low-pressure mercury lamp, a high-pressure mercury lamp, an ultrahigh-pressure lamp, a xenon lamp, and an ultra-violet ray emitting laser (an excimer laser). The cured product of the present invention obtained from the above resin composition or the photosensitive film can be applied for a permanent resist or an interlayer insulating material for building-up in an